carbapenem resistance in *Acinetobacter spp*.

Conclusion: Multiple mechanisms involved for carbapenem resistance in *Acinetobacter spp*. and therefore, understanding carbapenem resistance mechanisms might be crucial for the development of novel therapeutic strategies. However, it will be an important approach in the near future if one attempt to develop possible targets of new agents to control antimicrobial resistance in nosocomial pathogens such as *Acinetobacter spp*.

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17.023

Antimicrobial Susceptibility and Serotype Distribution of Nontyphoid Salmonella Clinical Isolates in Seven Asian Countries, 2003—2005

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Background: Nontyphoid Salmonella infections are rampant in Asia but there has been no large scale collaborative study to evaluate the serotype distribution and antimicrobial susceptibility in this region.

Methods: Clinical isolates of nontyphoid Salmonella were collected from clinical specimens from 11 medical centers in 7 Asian countries from 2003 to 2005. Broth microdilution method was performed to determine the minimum inhibitory concentrations of 6 antimicrobial agents.

Results: A total of 400 clinical isolates were collected from Hong Kong, Korea, Philippines, Singapore, Sri Lanka, Taiwan, and Thailand. The overall susceptibility was higher to ceftriaxone (97%) and ciprofloxacin (95.5%) than to traditional antibiotics (chloramphenicol, 72.3%; trimethoprim/sulphamethoxazole, 71%; ampicillin, 65.5%; and tetracycline, 54.3%). Among these countries, isolates from Taiwan and Thailand showed higher resistance to each of the 4 traditional antibiotics (all $p < 0.001$), and those from Korea showed higher resistance to ciprofloxacin (13.5% vs 3.2%; $p = 0.004$). The multidrug-resistant rate (MDR) was significantly higher in isolates belonging to serogroups B (49.6%) and C1 (46.9%) than other serogroups (all $p < 0.004$). MDR was common in *S. Heidelberg* (100%), *S. Panama* (87.5%), *S. Virchow* (87.5%), *S. Choleraesuis* (85.7%), and *S. Typhimurium* (54.4%). High rates of reduced susceptibility to ciprofloxacin (MIC= 0.125—1 mg/L) were found in isolates from Taiwan (48.2%), Thailand (46.2%) and Korea (36.5%), especially in *S. Choleraesuis* (68.8%) and *S. Virchow* (75%). Overall decreased susceptibility to ceftriaxone (MIC>2 mg/L) remained low except isolates from Taiwan (40.7%) or isolates of *S. Typhimurium* (28.6%) and *S. Panama* (25%).

Conclusion: Ceftriaxone appears to be drug of choice in the treatment of invasive nontyphoid Salmonella infections. High rate of reduced susceptibility to ciprofloxacin in some Asian countries as well as in some Salmonella serotypes is a concern. Prudent use of antibiotics in both

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Nationwide Surveillance of in vitro Activities of Tigecycline against Clinical Isolates of *Acinetobacter baumannii* in Taiwan

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Background: The Tigecycline In-Vitro Surveillance in Taiwan (TIST), initiated in 2006, is a nationwide surveillance program designed to monitor longitudinally the in vitro activities of tigecycline against commonly encountered resistant bacteria in Taiwan. This study aims to determine the in vitro activities of tigecycline against clinical isolates of *Acinetobacter baumannii* in Taiwan.

Methods: A total of 393 isolates of *A. baumannii* were collected from various sources of patients treated at 20 teaching hospitals. Minimum inhibitory concentrations (MICs) for tigecycline were determined by the broth microdilution methods according the guidelines described by Clinical and Laboratory Standards Institute (CLSI). The results were interpreted by the MIC criteria provided by U.S. FDA tigecycline susceptibility breakpoints listed for *Enterobacteriaceae* (S, $\leq 2\,\mu g/mL$; I, $4\,\mu g/mL$; R, $\geq 8\,\mu g/mL$). All isolates were also examined for susceptibility to other 11 antimicrobial agents using the disk diffusion method and the results were interpreted by the CLSI criteria.

Results: Of these *A. baumannii* isolates, 81.7% were susceptible to tigecycline by the broth dilution method. Susceptibility rates of tigecycline to several resistant phenotypes determined by the disk diffusion method are shown below.

Conclusion: Tigecycline exhibited good *in vitro* activities (>70%) against Taiwanese *A. baumannii* isolates, including various resistant phenotypes.

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